

STCG TANK SUBGROUP MEETING MINUTES

April 13, 1999

Welcome/Updates/Announcements (Dennis Brown)

Dennis opened the meeting and announced that Cathy Louie has moved on to greener pastures. We are waiting for Jon Peschong (ORP) to name her successor as the Tank Subgroup Lead.

Paul Scott decided that the Geosafe tour would be cancelled and rescheduled when more of the Subgroup voting members are available.

Rob Yasek provided information on the TechCon ITRD Vendor Forum for the Tank Farms Surface Infiltration Project scheduled for May 4-6, 1999 at the Hills Street Conference Center in Richland. Contact Rob at 372-1270 if you are interested. For further information, the TechCon website address is:

<http://web1.ead.anl.gov/techcon/projects/hanford/tanks>.

Plans for S&T Needs Workshop (Ken Gasper and Paul Scott)

Ken Gasper reported that the River Protection Program (formerly known as TWRS) received the TFA response to the FY99 tank technology needs a couple of months ago, including what they will fund, the specific work scope, and how it integrates with other sites. The S&T needs statements supporting only River Protection Program (RPP)-Privatization, but not the PHMC Team, have not been included in the PHMC Team submittal. The DOE Office of River Protection has responsibility for those needs.

Operations staff have held some workshops to identify S&T needs in three key areas: 1) reducing the cost of pit jobs, 2) radical reduction in salt-well pumping cost, and 3) reducing the costs of SST surveillance monitoring. S&T needs statements identified in this ongoing process will be forwarded to the STCG throughout the year, as they become available. DOE/ORP comments have not all been incorporated, and there are a couple of ORP endorsements still awaited. No need statement will be forwarded to the STCG that does not have ORP endorsement. (In the days following the May 11 meeting, ORP endorsed all needs statements except the science need RL-WT-NEWOX-S, Aluminum Chemistry. ORP explained that work funded to support RPP-Privatization already addressed this need.)

Paul Scott noted that Ken and others have modified the FY 1999 S&T needs statements as necessary, as well as generating the new set of FY 2000 S&T needs statements. All the needs statements will be sent out electronically for review by the Subgroup members against their own set of values. Subgroup members were asked to let Paul know if they

wanted any changes made to the needs statements before the S&T needs workshop on May 11, and to raise any concerns as we go through the process.

Our tank S&T needs workshop has changed a lot over the years. This year we are only asking for endorsement of the needs, not prioritization. The RPP project managers supplied priority ratings this year for each need.

Paul asked the group if they felt they could be more strategic/forward looking and try to have an influence on the planning process, rather than just reacting to FDH plans. For example, TIPs will be written for some of the needs. Paul would like to solicit the views of the Subgroup members on which technology decisions are significant enough to warrant becoming TIPs.

OST Work Package Prioritization System (Bob Allen)

TFA has five tank sites now that West Valley, New York has been added this year. Jon Peschong took Cathy Louie's place on the User Steering Group representing Hanford. Jim Honeyman is also on that steering group; he reviews the technical responses and gets comments to TFA. Expected TFA funding in FY 2001 will be \$58.7M, including integration of the crosscut programs.

The overall picture of the needs process is that the sites submit their S&T needs, TFA prepares their technical responses, TFA constructs work packages (portfolios of technologies proposed for development to address specific problems, usually \$3-5M in size), and OST prioritizes work packages across the Focus Areas. Proposed TFA prioritization criteria include: breadth of the need, other technology impacts, user commitment, PtC priority (1=critical importance to PtC, 2=significant importance to PtC, 3=important to PtC), and implementation potential. OST prioritization criteria include: PBS value, number of deployment commitments or potential deployments, site S&T needs priorities, technological risk of waste streams/critical paths, and technology cost savings.

Coordination with GW/VZ Integration Project (Mike Truex)

Four of the eight technical elements of the GW/VZ Integration Project S&T Roadmap are inventory, vadose zone, groundwater, and river. S&T needs are identified under each of these technical elements. The project used a rigorous process with broad participation to identify the underlying technical gaps that form the basis for the project S&T needs. The objectives of each technical element were presented, along with the primary technical gaps. The GW/VZ Integration Project is also trying to link with the existing TWRS vadose zone S&T needs.

Mike noted that comments on the GW/VZ S&T needs were received from Gary Ballew and Barbara Harper. He also mentioned that the Cultural/Stakeholder Concerns sections of the needs statements will be filled out as we go through the needs process.

Priority ratings are now based on the Paths to Closure (PtC) and have been estimated by the ER projects. They have also noted whether the needs are technology needs (gaps) or technology opportunities (enhancements).

Before the April 22 GW/VZ Science Needs Workshop, Mike will try to incorporate any comments from reviewers.

Paul Scott noted that the S&T needs workshop on May 11 would review all the needs that anyone wants to discuss. We propose to focus on the new needs, endorse the old ones as a group, but deal with any exceptions and discuss any issues. We will endorse the needs at this workshop.

Remediation of Underground Storage Tanks using Planar In Situ Vitrification (Jack McElroy, Geosafe Corporation)

Jack McElroy provided a description of the planar ISV technology that began development several years ago. Geosafe is using it to clean up a nuclear test site in Australia right now, and they are starting a demonstration at Los Alamos. The technology has also been used at Idaho to demonstrate planar melting on an INEEL 10,000-gallon tank. A ROD will be issued in September 1999 for in situ vitrification of the INEEL tanks.

ISV is a preferred technology for Pit 9 at Idaho. They are also conceptualizing a project to ISV the K-Basin sludge in a concrete vault. ISV could be used on the mixed waste cribs, turning them into low-level waste, with the hazardous waste destroyed and the radionuclides well mixed within the melt.

Ken Gasper mentioned that ISV could be an alternative for dealing with the hard heel in tank AX-104. It may be a temporary remedy (like reactor cocooning). Later, the immobilized waste could be removed in blocks. Another option is to ISV the TRU waste in the Z-9 trench. The ISV technology would disperse the plutonium equally and dilute it, with no risk of criticality.

Action Items

- Send TechCon website address to Subgroup members (Facilitator). Done.
- Send copies of the new S&T needs to all absent voting members (Facilitator). Done.
- Send Geosafe brochure to Barbara Harper and absent voting members (Facilitator). Done.

Meeting Attendees

Bob Allen (PNNL/TFA)
John Appel (LMHC)
Gary Ballew (Pacific Rim Enterprise Center)
Bill Bonner (PNNL)
Dennis Brown (DOE-RL/STP)
Eric Dyslard (WPI/TFA)
Linda Fassbender (PNNL)
Tom Frater (FDH)
Ed Fredenburg (LMHC)
Ken Gasper (LMHC)
Jim Hanson (DOE-RL/STP)
Barbara Harper (YIN)
Fred Mann (FDNW)
Billie Mauss (DOE-RL)
Scott Petersen (BHI)
Paul Scott (FDH)
John Stanfill (Nez Perce Tribe)
Mike Truex (PNNL)
Joan Young (TRW/TFA support)

Next Meeting

The next meeting will be held on May 11 at 1:00 p.m. in the ISB-1 White Bluffs Room.